

## Remarks

Claims 1-27 and 29-31, 33-52, 59-72 are pending in this application. Claims 1, 3-5, 7, 9, 10, 14, 15, 22-24, 26, 30, 31, 34, 42, 43, 48-51, 59, 61, 65, 68, and 72 have been amended in various particulars as indicated hereinabove. Claims 32 and 53-58 have been cancelled without prejudice or disclaimer and to hopefully expedite prosecution.

Counsel notes with appreciation the courtesy of the interview held today along with the helpful suggestions for improving the claims, which suggestions are manifest in the forgoing amendments.

Claims 1-6, 8-9, 11, 13, 15-27, 29-33, 35-37, 39, 41 and 43-64 were rejected under 35 U.S.C. 103(a) as being unpatentable over Auer *et al.* (US 5,383,467) in view of Narciso, Jr. (US 5,217,456). In a related rejection, claims 7, 10, 12, 14, 34, 38, 40 and 42 were rejected under 35 U.S.C. 103(a) as being unpatentable over Auer *et al.* (US 5,383,467) and Narciso, Jr. (US 5,217,456) as applied to claims 1, 9, 11, 26, 37, and 39 in view of Kohno *et al.* (US 5,647,359).

These rejections are respectfully traversed for the following reasons.

Each of the independent claims is deemed to distinguish over the applied combination of references.

In review, there are two basic optical technologies for intra vascular analysis. Optical coherence tomography (OCT) provides structural information. Auer is an example of this. It can provide texture or profile information on the vessel walls. Modern OCT systems can further analyze the vessels in depth. Spectral analysis is directed more at determining the chemical structure as described in the context of the embodiments of the invention in this application. Narciso is somewhat different using mostly fluorescence and reflectivity information, rather than the near infrared.

In the present claimed invention, the optical signals are analyzed in a proximity analysis to determine whether the probe is close enough to the vessel walls to enable

assessment of the vessel walls. Then, the received optical signals are used to assess the vessel walls when the probe is determined to be close enough to the vessels walls to enable the assessment of the vessel walls in a spectral analysis.

Neither of the applied references has this later feature. There is nothing in either reference that would suggest using a proximity analysis to control the chemical, spectral analysis.

For these reasons, these rejections should be withdrawn.

Claims 65-72 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kohno *et al.* (US 5,647,359) in view of Narciso, Jr. (US 5,217,456). This rejection is respectfully traversed for the following reasons.

The foregoing analysis generally applies to this rejection also. Kohno could be deemed more relevant insofar as it suggests determining blood oxygen levels when the probe is remote from the vessels walls. Nevertheless, Kohno does not suggest to use a proximity analysis to control the chemical, spectral analysis as claimed based on probe proximity to the vessel walls.

Thus this rejection should also be withdrawn.

Claims 1-27 and 29-64 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-73 of copending Application No. 10/426,750 in view of Auer *et al.* US 5,383,467.

Continued deferment of the resolution of this issue is requested until patentable matter is identified in either or both of the applications.

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It is believed that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,

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